Reply to non-final Office Action of April 26, 2010

# REMARKS/ARGUMENTS

Claims 1-7, 9-17, 19, and 21-26 are pending in the present application.

This Amendment is in response to the non-final Office Action mailed April 26, 2010. In the Office Action, the Examiner objected to the drawings and Specification, rejected claims 13, 14-17 and 22 under 35 U.S.C. §112; rejected claims 1, 2, 4, 5, 19, 23, and 26 under 35 U.S.C. §102(b); claim 11 is rejected under 35 U.S.C. §102(b); and claims 3-7, 10, 12-17, 21, 24, and 25 under 35 U.S.C. §103(a). Reconsideration in light of the remarks made herein is respectfully requested.

# Objections to the Drawings

In the Office Action, the Examiner objected to the drawings under 37 C.F.R §1.83(a).

1. Objection to Figure 4:

The Examiner contends that the addition of the UV source (430) does not show the structural relationship with the device, and thus renders the drawings not acceptable. Applicant respectfully disagrees for the following reasons.

First, the Examiner raised the objection without citing any authority, either from the MPEP, CFR, or case law, and without any analysis or discussion regarding the objection to the cited authority. The objection is therefore without merit.

Second, drawings are furnished only when necessary for the understanding of the subject matter to be patented. 35 U.S.C. 113 ("The applicant shall furnish a drawing where necessary for the understanding of the subject matter to be patented."). 37 CFR 1.81 (a) ("The applicant for a patent is required to furnish a drawing of his or her invention where necessary for the understanding of the subject matter sought to be patented;") The Examiner has not shown that the structural relationship between the UV source (430) is necessary for the understanding of the subject matter to be patented.

Accordingly, Applicant respectfully requests the objection to Figure 4 be withdrawn.

2. Objections to drawings regarding "Fresnel lens", "multiplexing circuit", and "ultraviolet radiation source":

The Examiner contends that the "Fresnel lens", "multiplexing circuit", and "ultraviolet radiation source" as cited in the clams must be shown or the feature(s) cancelled from the claim(s). Applicant respectfully disagrees for the following reasons.

First, drawings are furnished only when necessary for the understanding of the subject matter to be patented. 35 U.S.C. 113 ("The applicant shall furnish a drawing where necessary for the understanding of the subject matter to be patented."). 37 CFR 1.81 (a) ("The applicant for a patent is required to furnish a drawing of his or her invention where necessary for the understanding of the subject matter sought to be patented;") The Examiner has not shown that the absence of the specific references of the "Fresnel lens", "multiplexing circuit", and "sterilization mechanism" in the drawings renders the subject matter to be patented not understood by one skilled in the art.

Second, the terms "Fresnel lens", "multiplexing circuit", and "ultraviolet radiation source" are conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, and therefore should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation. 37 C.F.R. \$1.83(a).

37 C.F.R §1.83(a) specifically states:

(a) The drawing in a nonprovisional application must show every feature of the invention specified in the claims. However, conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box). In addition, tables and sequence listings that are included in the specification are, except for applications filed under 37 U.S.C. 371, not permitted to be included in the drawings. (Emphasis added.)

The Fresnel lens is shown as element "140" in Figure 1. The Fresnel lens is a conventional feature that is disclosed in the description (Specification, page 7, lines 14-16). The multiplexing circuit is shown as element "536" in Figure 5. The multiplexing circuit is a conventional feature that is disclosed in the description (Specification, page 10, lines 4-6). The ultraviolet radiation is shown as element "430" in Figure 4 and is disclosed in the description in the amendment filed on June 18, 2009. It is noted that aspects of the "Fresnel lens",

Docket No: 8538P016 Page 8 of 21 TVN/tn

"multiplexing circuit", and "ultraviolet radiation source" are recited in dependent claims, and provides further specificity to the corresponding independent claims and have fully supported in the specification.

In the Office Action, the Examiner contends that the arguments in response to the drawing objections are not persuasive as it is not clear from the specification where the Fresnel lens is located, where the multiplexing circuit is located, and how the ultraviolet radiation source is part of the apparatus (Office Action, page 9, paragraph 36). Applicant respectfully disagrees for the following reasons.

First, even if it is true that it is not clear from the specification where the Fresnel lens is located, where the multiplexing circuit is located, and how the ultraviolet radiation source is part of the apparatus, the objections to the drawings is improper. The Examiner may object to the Specification or reject claims under 35 U.S.C. §112, but not objection to the drawings.

Second, the Specification provides ample support for the Fresnel lens, the multiplexing circuit, and the ultra radiation source as discussed above. The Examiner is directed to the cited paragraphs and review the entire Specification carefully.

Accordingly, Applicant respectfully requests the objections to the drawings be withdrawn

# Objections to the Specification

In the Office Action, the Examiner objected to the Specification under 35 U.S.C. §132(a) because it introduces new matter into the disclosure. The Examiner states that the drive circuit including a multiplexing circuit is not supported by the original disclosure (Office Action, page 3, paragraph 5). Application respectfully disagrees for the following reasons

Amendments to an application which are supported in the original description are NOT new matter. MPEP 2163.07. The drive circuit including a multiplexing circuit is fully disclosed in the originally filed specification. See, for example, Specification, page 10, lines 4-6. The disclosure describes a drive circuit 536 that provides the drive signal to the ejectors on ejector head 504 (Specification, page 9, line 19). In addition, the Specification describes that the RF power is switched on for a time duration and then switched off for several microseconds (Specification, page 9, last line – page 10, line 2). A multiplexing circuit may be used to

alternately switch group of ejectors on and off and avoid overlapping firing times (Specification, page 10, lines 4-6).

Accordingly, Applicant respectfully requests the objections to the Specification under 35 U.S.C. §132(a) be withdrawn.

# Rejection Under 35 U.S.C. § 112

# 1. Claims 14-17, and 22:

In the Office Action, the Examiner rejected claims 14-17 and 22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner states that the limitation of "a plurality of lenses positioned between the at least one transducer and the capillary wave" is not described in the specification (Office Action, page 4, paragraph 7). Applicant respectfully disagrees.

The Specification provides full support for the above aspect of the claimed invention. See, for example, Specification, Figure 3 and page 5, lines 21-28 ("... to replace the plurality of transducers with a single transducer, the energy from the single transducer distributed to multiple lenses corresponding to multiple droplet sources..."); page 5, lines 16-18 ("In capillary wave droplet systems, the lower frequencies used allows more flexibility in materials and tolerances used to fabricate transducers and acoustic lenses used to form the array of droplet sources."

# 2. Claim 13:

In the Office Action, the Examiner rejected claims 13 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention (Office Action, page 4, paragraph 10). Specifically, the Examiner contends that the phrase "MEMS cover" renders the claim indefinite because it is unclear what is being claimed. Applicant respectfully disagrees. One person skilled in the art would understand that a MEMS cover is a micro electromechanical structure (MEMS) cover, as described in the Specification, page 6 lines 28-29 (last paragraph). The Examiner has not shown specifically what is unclear about "MEMS cover".

Accordingly, Applicant respectfully requests the rejections under 35 U.S.C. \$112 be withdrawn.

Docket No: 8538P016 Page 10 of 21 TVN/tn

# Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1, 2, 4, 5, 19, 23, and 26 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,485,828 issued to Hauser ("Hauser"). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a prima facie case of anticipation.

Hauser discloses a portable device for micropulverization generated by ultrasound waves. Transducer 16 is supplied with a frequency between 1 and 5 megahertz by an electronic circuit 18 running on batteries 20 (Hauser, col. 2, lines 50-52). The ultrasound waves are sent through a cassette 24 containing the liquid for micropulverization to concentrate at one point in the liquid near its surface (Hauser, col. 2, lines 55-58). A jet-shaped 'acoustic fountain' 26 thus forms on the surface of the liquid for micropulverization above the opening 28 of cassette 24. This jet 26 generates a mist of relatively uniform microdroplets 30 with the smallest diameter between 3 and 6 µm (Hauser, col. 2, lines 58-62). The mist is moved towards the inhaler or diffuser 32 by ventilator 36 (Hauser, col. 2, lines 62-63). At the end of the cassette 24 is a cross membrane 34 made of material with acoustic impedance identical or very close to that of the propagation medium in cell 12 (Hauser, col. 3, lines 35-39).

Hauser does not disclose, either expressly or inherently, at least one of: (1) a first driver element to generate acoustic energy, the first driver element generating acoustic energy in pulses that are of a short duration and low frequency such that a droplet of pharmaceutical product is output from a capillary wave; (2) a first acoustic lens positioned between the first driver element and the capillary wave to focus the acoustic energy generated by the first driver element; and (3) a delivery system to maintain the pharmaceutical product in a position to receive the acoustic energy from the first acoustic lens and cause ejection of the droplet of pharmaceutical product.

First, <u>Hauser</u> merely discloses a mist of relatively uniform microdroplets 30 with the smallest diameter between 3 and 6  $\mu$ m (<u>Hauser</u>, col. 2, lines 58-60), not a droplet of pharmaceutical product is output from a capillary wave. The uniform microdroplets 30 are uniform and comes from a jet-shaped acoustic fountain. Accordingly, they are not output from a capillary wave.

Second, <u>Hauser</u> merely discloses a cross membrane 34 made of material with acoustic impedance identical or very close to that of the propagation medium in cell 12 (Hauser, col. 3,

Docket No: 8538P016 Page 11 of 21 TVN/tn

lines 35-39), not a first acoustic lens positioned between the first driver element and the capillary wave to focus the acoustic energy generated by the first driver element. The cross membrane 34 is merely made of material with acoustic impedance identical or very close to that of the propagation medium in cell 12. It is not an acoustic lens.

Third, <u>Hauser</u> merely discloses the mist is moved towards the inhaler or diffuser 32 by ventilator 36 (<u>Hauser</u>, col. 2, lines 62-63), not a delivery system to maintain the pharmaceutical product in a position to receive the acoustic energy from the first acoustic lens and cause ejection of the droplet of pharmaceutical product. The ventilator 36 is located at the diffuser 32. It is used merely to move the mist toward the inhaler or diffuser 32. Therefore, it cannot maintain the product in a position to receive the acoustic energy and cause ejection of the droplet.

To anticipate a claim, the reference must teach every element of a claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," Vergegaal Bros, v, Union Oil Co, of California, 814 F.2d 628, 631, 2 USPO 2d 1051, 1053 (Fed. Cir. 1987), "The identical invention must be shown in as complete detail as is contained in the...claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989). The Examiner bears the burden of presenting at least a prima facie case of anticipation. In re King, 801 F.2d 1324, 1327, 231 USPO 136, 138-139 (Fed. Cir. 1986); In re Wilder, 429 F.2d 447, 450, 166 USPO 545, 548 (CCPA 1970). Only if that burden is met, does the burden of going forward shift to the applicant. In re King, 801 F.2d at 1327, 231 USPO at 138-139; In re Wilder, 429 F.2d at 450, 166 USPO at 548. Once a prima facie case is established and rebuttal evidence is submitted, the ultimate question becomes whether, based on the totality of the record, the Examiner carried his burden of proof by a preponderance. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPO2d 1443, 1444 (Fed. Cir. 1992). If the Examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Since the Examiner failed to show that Hauser teaches or discloses any one of the above elements, the rejection under 35 U.S.C. §102 is improper.

Therefore, Applicant believes that independent claims 1, 23, and 26 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §102(b) be withdrawn.

Docket No: 8538P016 Page 12 of 21 TVN/tn

# Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 3, 6, 13, 9-11, 14-16, and 22 under 35 U.S.C. \$103(a) as being unpatentable over <a href="Hauser">Hauser</a>; claim 7 is rejected under 35 U.S.C. \$103(a) as being unpatentable over <a href="Hauser">Hauser</a> as applied to claim 6 above and further in view of U.S. Patent No. 5,231,426 issued to Sweet ("Sweet"); claims 21, 24, and 25 are rejected under 35 U.S.C. \$103(a) as being unpatentable over <a href="Hauser">Hauser</a> in view of Elrod ("Nozzless droplet...") ("Elrod"); claim 12 is rejected under 35 U.S.C. \$103(a) as being unpatentable over <a href="Hauser">Hauser</a> in view of U.S. Patent No. 5,372,126 issued to Blau ("Blau"); and claim 17 is rejected under 35 U.S.C. \$103(a) as being unpatentable over <a href="Hauser">Hauser</a> in view of U.S. Patent No. 6,205,999 issued to Ivri ("Ivri"). Applicant respectfully traverses the rejection and submits that the Examiner has not met the burden of establishing a prima facie case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143*, *p. 2100-126 to 2100-130 (8th Ed., Rev. 5, August 2006).* Applicant respectfully submits that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Furthermore, the Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966), stated: "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined." MPEP 2141. In *KSR International Co. vs. Teleflex, Inc.*, 127 S.Ct. 1727 (2007) (Kennedy, J.), the Court explained that "[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." The Court further required that an explicit analysis for this reason must be made.

"[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR 127 S.Ct. at 1741, quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006). In the instant case, Applicant respectfully submits that there are significant differences between the cited references and the claimed invention and there is no apparent reason to combine the known elements in the manner as claimed, and thus no prima facie case of obviousness has been established.

#### Claims 3, 6, 13, 9-11, 14-16, and 22:

Hauser is discussed above.

Hauser, taken alone or in any combination, does not disclose or render obvious, at least one of: (1) – (3) as above in the 102 rejections, as recited in claim 1 and similarly in independent claims 9 and 11; (4) the first acoustic lens is a fresnel lens; as recited in claim 3; (5) a portable energy source to provide energy to the first driver element; and a second driver element coupled to the portable energy source to provide drive signal to ejectors that eject droplets of the pharmaceutical product; as recited in claim 6; (6) a MEMS cover to that protects the driver element from contamination when the driver element is not outputting acoustic energy; as recited in claim 13; (7) a portable energy supply; at least one transducer coupled to the portable energy supply, the at least one transducer to output acoustic energy below 15 Mhz and directed to a capillary wave; a plurality of lenses positioned between the at least one transducer and the capillary wave to receive and focus energy from the at least one transducer; and a delivery system to maintain a reservoir of pharmaceutical product, a distance from a top surface of a lens and a surface of the reservoir of pharmaceutical product being less than 150 micro meters, the reservoir of pharmaceutical product to receive energy from the plurality of lenses, the received energy to cause ejection of a plurality of droplets; as recited in independent claim 14.

As discussed above, <u>Hauser</u> does not disclose or render obvious elements (1) - (3) as above. Accordingly, a combination of <u>Hauser</u> with any other references, including inherency or official notice, in rejecting claims 3, 6, 13, 9-11, 14-16, and 22 is improper.

Regarding claim 6, <u>Hauser</u> merely discloses a transducer 16 (<u>Hauser</u>, col. 2, lines 50-52), not a second driver element coupled to the portable energy source to provide drive signal to ejectors that eject droplets of the pharmaceutical product.

The Examiner merely states that it would have been obvious to have a second driver element since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (Office Action, page 6, paragraph 23). Applicant respectfully disagrees. The second driver element is not a duplication of the first driver element. It provides drive signal to ejectors that eject droplets of the pharmaceutical product. Since <a href="Hauser"><u>Hauser</u></a> does not disclose an ejector, <a href="Hauser"><u>Hauser</u></a> cannot and does not disclose a second driver to provide drive signal to ejector.

Regarding claim 13, <u>Hauser</u> merely discloses cavity 14 is closed by an electromechanical transducer 16 (<u>Hauser</u>, col. 2, lines 48-50), not a MEMS cover to that protects the driver element from contamination when the driver element is not outputting acoustic energy. The Examiner merely states that it would have been obvious to construct the cover as a MEMS cover. However, since the cavity 14 is closed by the transducer 16 itself, there is no more room to provide a cover.

Regarding claims 14, <u>Hauser</u> merely discloses several such reservoirs containing different liquids for micro-pulverization and several within different characteristics (<u>Hauser</u>, col. 3, lines 23-30), not a plurality of lenses positioned between the at least one transducer and the capillary wave to receive and focus energy from the at least one transducer. A reservoir is not the same as a lens.

# 2. Claim 7:

Hauser is discussed above.

Applicant notes that the Examiner cites U.S. Patent No. 5,832,428 as <u>Sweet</u>. However, Patent No. 5,832,428 is issued to Chow et al. with a title "Search engine for phrase recognition based on prefix/body/suffix architecture". Applicant assumes that this is a typographical error and the correct Patent number should be 5,231,426, issued to <u>Sweet</u>.

Sweet discloses a nozzleness droplet projection system. Electronic power supply 21 is connected to the array of electro-acoustic transducers 15 through an electronic multiplexer 41 which selectively excites any sequence of electro-acoustic transducers 15 to project a desired pattern of droplets 12 onto the projection surface 14 (Sweet, col. 3, lines 45-50).

<u>Hauser</u> and <u>Sweet</u>, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) - (3) as above in the 102 rejections, as recited in claim 1; and (8) a

Docket No: 8538P016 Page 15 of 21 TVN/tn

multiplexing circuit that directs RF energy from the portable energy source to alternately switch groups of the ejectors on and off, as recited in claim 7.

As discussed above, <u>Hauser</u> does not disclose at least one of the elements (1) - (3) as recited in claim 1. Accordingly, a combination of <u>Hauser</u> with any other references in rejecting claim 7, which depends on claim 1, is improper.

Furthermore, <u>Sweet</u> merely discloses an electronic multiplexer 41 which selectively excites any sequence of electro-acoustic transducers 15 (<u>Sweet</u>, col. 3, lines 45-50), not a multiplexing circuit that directs RF energy from the portable energy source to alternately switch groups of the ejectors on and off, as recited in amended claim 7. Selectively exciting a sequence of transducers is not the same as alternately switching on and off the ejectors.

# 3. Claim 21, 24, and 25:

Hauser is discussed above.

Elrod discloses a nozzleless droplet formation with focused acoustic beams. Following the burst of acoustic energy, a mound rises up from the liquid surface, and a single droplet is expelled at a velocity of several meters per second. After droplet ejection, the surface relaxes and a capillary wave propagates away from the focal spot (Elrod, page 3441, left column, second paragraph).

Hauser and Elrod, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) – (3) as above in the 102 rejections, as recited in claim 1 and similarly in independent claim 23; and (9) the capillary wave is generated by relaxation of a principle mound, as recited in claims 21 and 24.

As discussed above, <u>Hauser</u> does not disclose at least one of the elements (1) - (3) as recited in claim 1. Accordingly, a combination of <u>Hauser</u> with any other references in rejecting claims 21, 24, and 25, which depends on claims 1 and 23, is improper.

# 4. Claim 12:

Hauser is discussed above.

<u>Blau</u> discloses a pulmonary sampling chamber. Ultraviolet light fixtures are place in the sputum induction (SI) room in a manner to sterilize the air and kill aerosolized microorganisms (Blau, col. 1, lines 48-50).

Docket No: 8538P016 Page 16 of 21 TVN/tn

<u>Hauser</u> and <u>Blau</u>, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) - (3) as above in the 102 rejections, as recited in claim 1 and similarly in independent claim 11; and (10) an ejector head to cover the acoustic lens, the ejector head being sterilized by an ultraviolet radiation source, as recited in claim 12.

As discussed above,  $\underline{\text{Hauser}}$  does not disclose at least one of the elements (1) - (3) as recited in claim 11. Accordingly, a combination of  $\underline{\text{Hauser}}$  with any other references in rejecting claim 12, which depends on claim 11, is improper.

Furthermore, <u>Blau</u> merely discloses using the UV light to sterilize the air kill aerosolized microorganisms (<u>Blau</u>, col. 1, lines 48-50), NOT an ultraviolet source to sterilize the ejector head. Sterilizing the air does not sterilize the ejector head or the acoustic lens.

# 5. Claim 17:

Hauser is discussed above.

Ivri discloses methods and apparatus for storing chemical compounds in a portable inhaler. An apparatus 10 includes an inhalation flow sensor 24 which detects the inhalation flow produced by the patient when inhaling from mouthpiece 22 (Ivri, col. 7, lines 50-53). Upon detection of the inhalation, sensor 24 sends an electrical signal to an electronic circuit which in turn sends an alternating voltage to vibrate a piezoelectric member 26 of aerosol generator 22 to aerosolize a liquid (Ivri, col. 7, lines 53-56).

<u>Hauser</u> and <u>Ivri</u>, taken alone or in any combination, do not disclose or render obvious, at least one of: (1) - (3) as above in the 102 rejections, as recited in claim 1 and similarly in independent claim 14; and (11) a circuit that detects a flow of air going into a patient's lungs and couples the transducer to the portable energy supply when a critical air speed is reached, as recited in claim 17.

As discussed above,  $\underline{\text{Hauser}}$  does not disclose at least one of the elements (1) - (3) as recited in claim 14. Accordingly, a combination of  $\underline{\text{Hauser}}$  with any other references in rejecting claim 17, which depends on claim 14, is improper.

Furthermore, <u>Ivri</u> merely discloses an inhalation flow sensor 24 which detects the inhalation flow (<u>Ivri</u>, col. 7, lines 50-53), not a circuit that detects a flow of air when a critical air speed is reached, as recited in claim 17. Detecting the inhalation flow merely detects if there is a flow. It does not detect the airflow when a critical air speed is reached.

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion, or motivation to combine the references. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. Hodosh v. Block Drug Col, Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination." In re Beattie, 974 F.2d 1309, 1312 (Fed. Cir. 1992), 24 USPQ2d 1040; Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPO (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. Interconnect Planning Corp. v. Feil, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPO 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references," Ex parte Clapp, 227 USPO 972, 973, (Bd.Pat.App,&Inter, 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of

being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 USPQ2d at 1432; *In re Fritch*, 972 F.2d 1260 (Fed. Cir. 1992), 23 USPO2d 1780.

Moreover, the Examiner failed to establish the factual inquires in the three-pronged test as required by the *Graham* factual inquires. There are significant differences between the cited references and the claimed invention as discussed above. Furthermore, the Examiner has not made an explicit analysis on the apparent reason to combine the known elements in the fashion in the claimed invention. Accordingly, there is no apparent reason to combine the teachings of Hauser, Sweet, Elrod, Blau, and Ivri in any combination.

In the present invention, the cited references do not expressly or implicitly disclose any of the above elements. In addition, the Examiner failed to present a convincing line of reasoning as to why a combination of <a href="Hauser, Sweet, Elrod">Hauser, Sweet, Elrod</a>, <a href="Blau">Blau</a>, and <a href="Ivri">Ivri</a> is an obvious application of inhaler using focused acoustic waves, or an explicit analysis on the apparent reason to combine Hauser, <a href="Sweet, Elrod">Sweet, Elrod</a>, <a href="Blau">Blau</a>, and <a href="Ivri">Ivri</a> in the manner as claimed.

Therefore, Applicant believes that independent claims 1, 9, 11, 23, and 26 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicant respectfully requests the rejection under 35 U.S.C. §103(a) be withdrawn.

Appl. No. 09/740,209

Amdt. Dated August 18, 2010

Reply to non-final Office Action of April 26, 2010

# Conclusion

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: August 18, 2010 By / THINH V. NGUYEN /

Thinh V. Nguyen Reg. No. 42,034

Tel.: (714) 557-3800 (Pacific Coast)

1279 Oakmead Parkway Sunnyvale, CA 94085-4040